

FIG. 1

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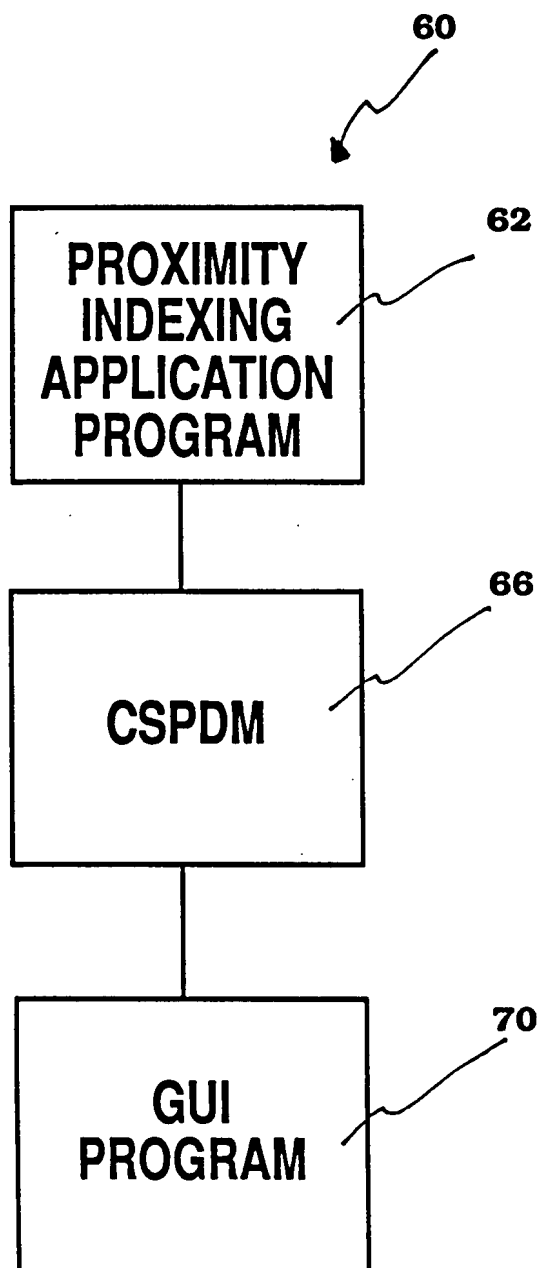


FIG. 2

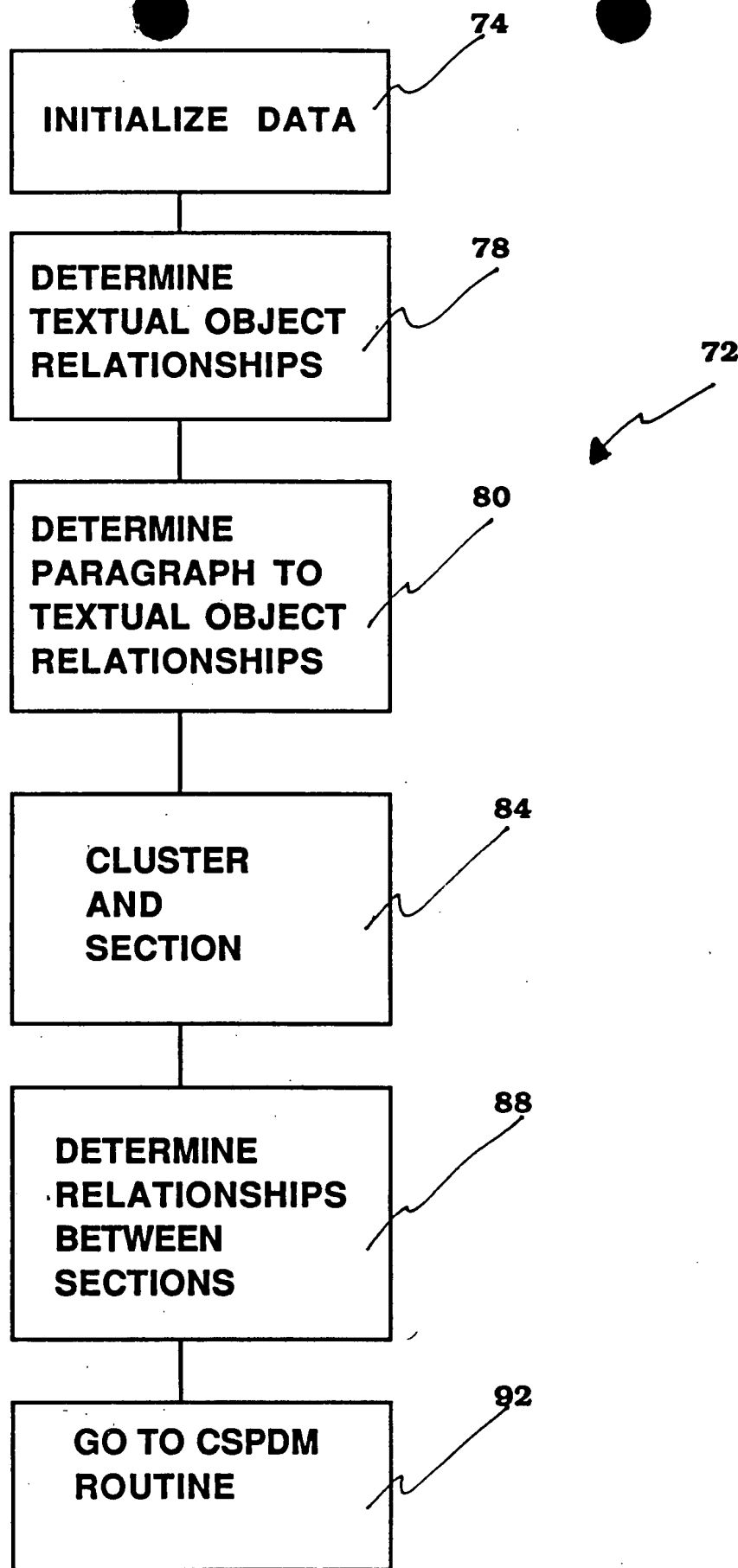


FIG. 3A

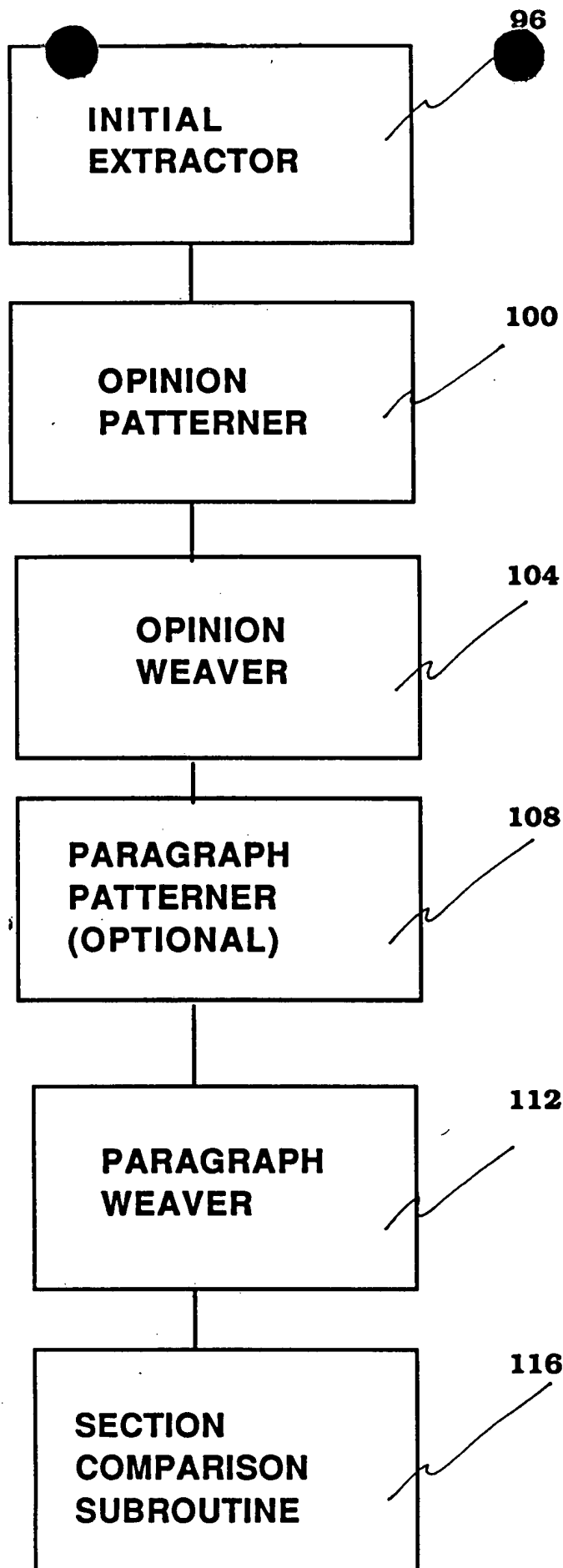


FIG. 3B

08 649304

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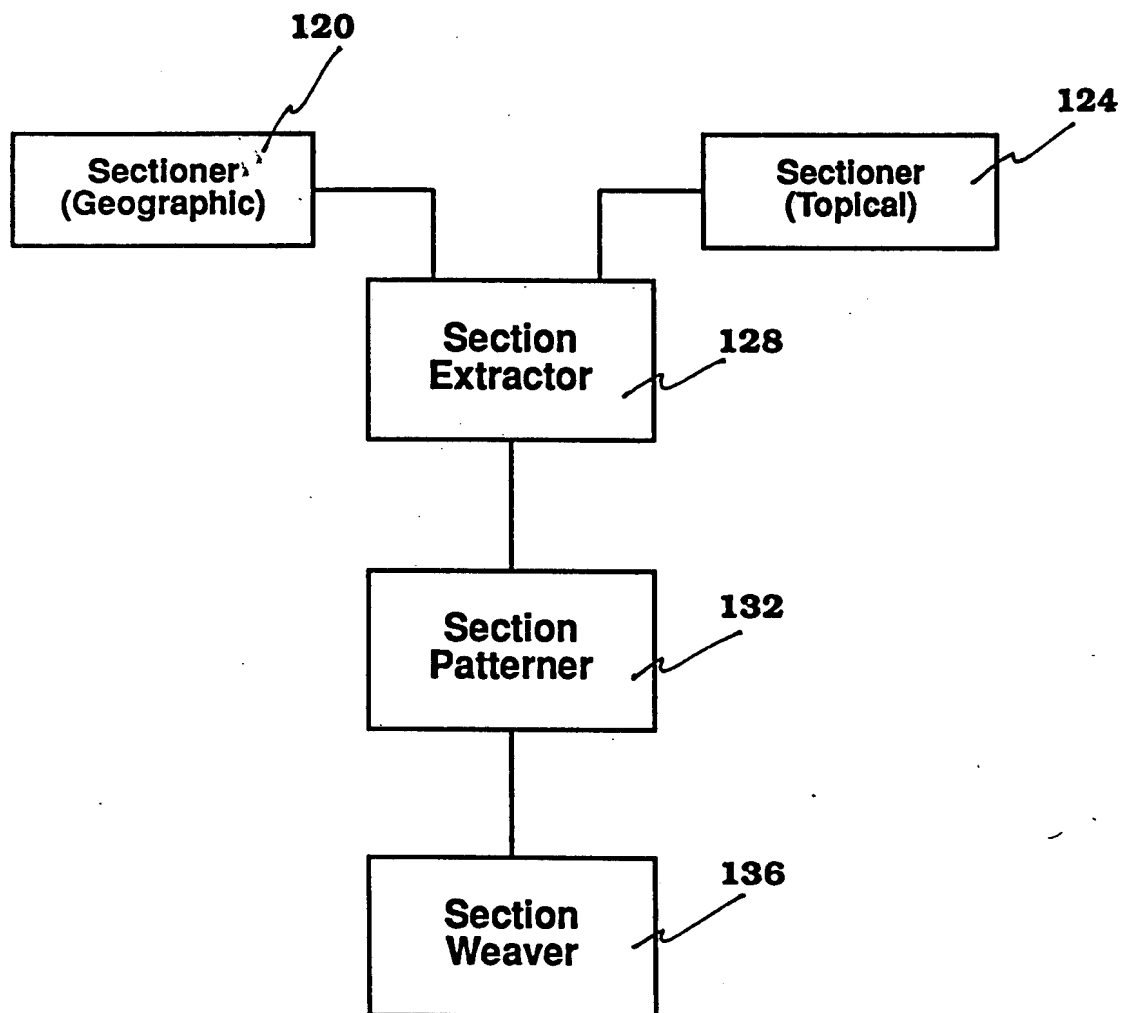


FIG. 3C

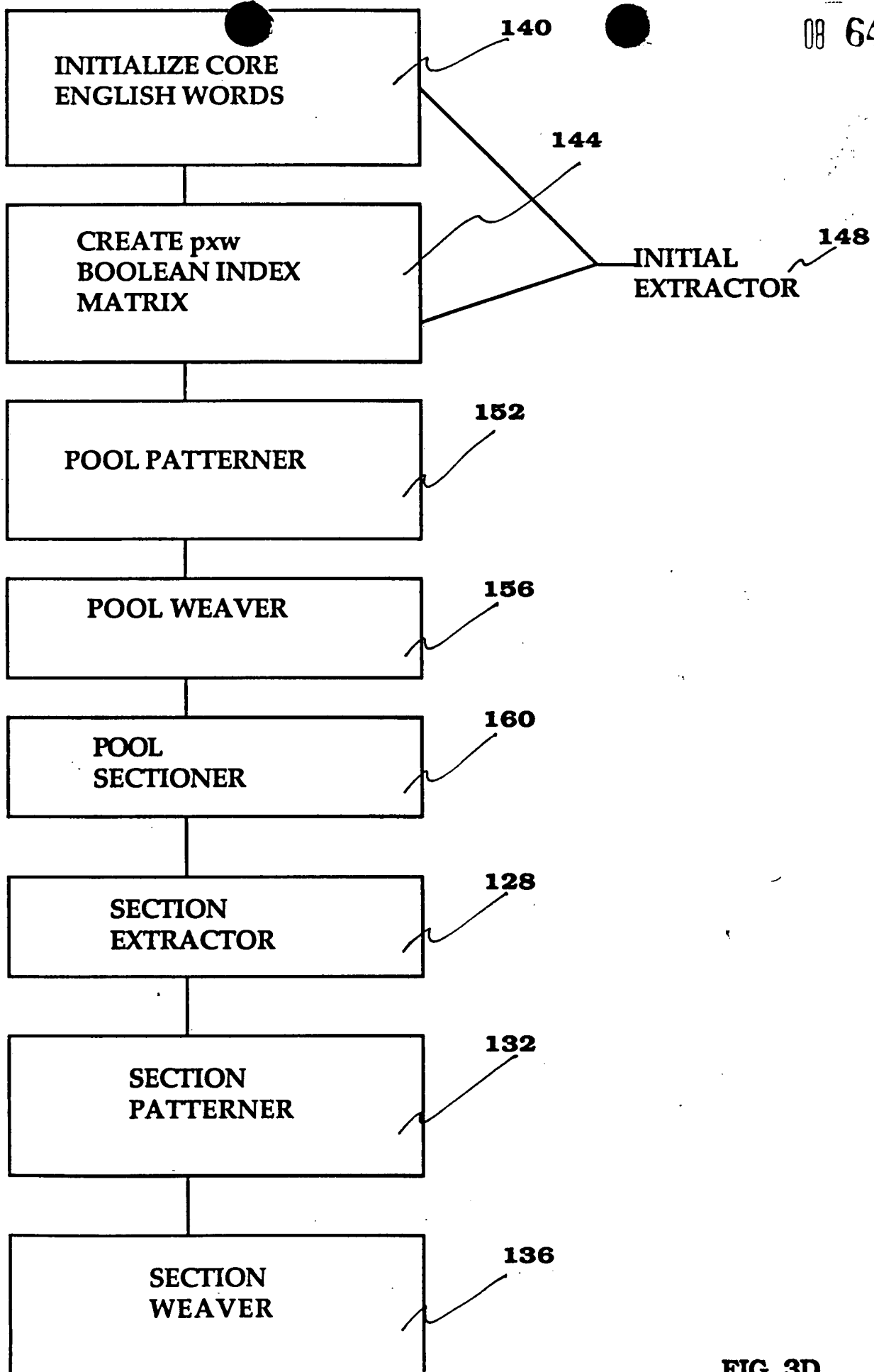
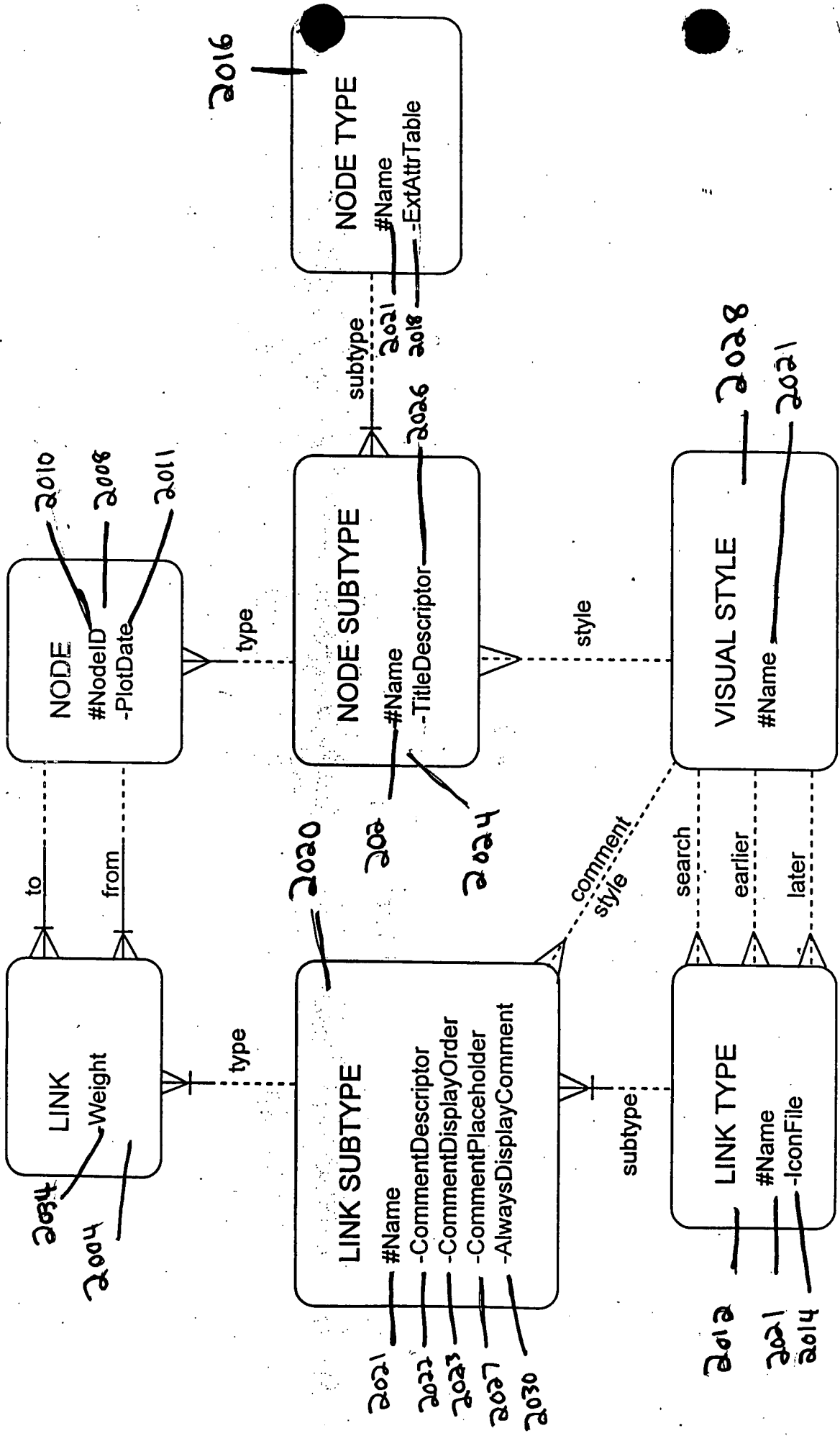


FIG. 3D



# Cluster Link Algorithm Update

Technical Note  
February 2, 1996

## Overview

This document describes the implementation of the cluster link algorithm that is currently being used in V-Search.

Consider a set of nodes  $N_0 \dots N_3$  connected by a sequence of direct links whose weights are given by  $W_1 \dots W_3$ , as shown in Figure 1.

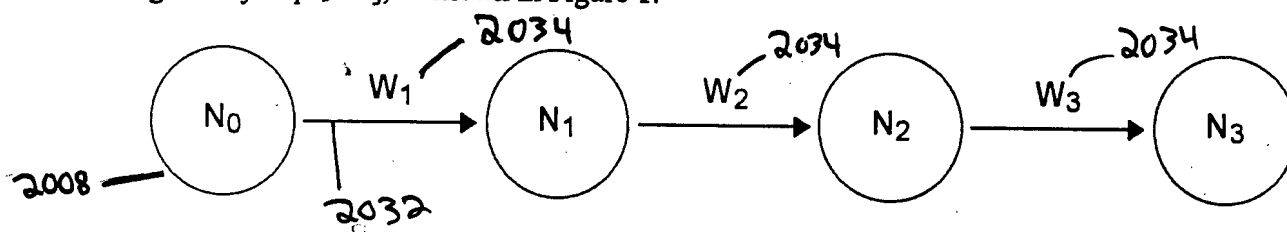


Figure 1: Direct Links

Node  $N_1$  is reachable from  $N_0$  through a path of length 1 (that is,  $N_0 \rightarrow N_1$ ); node  $N_2$  is reachable through a path of length 2 ( $N_0 \rightarrow N_1 \rightarrow N_2$ ); and so on.

Each path provides some evidence that the start node ( $N_0$ ) and destination node ( $N_1$ ,  $N_2$ , or  $N_3$ ) are related to some extent. The strength of the implied relationship depends on the length of the path, and on the weights of the individual direct links along that path.

In Figure 2, the implied relationships from  $N_0$  to  $N_1$ ,  $N_2$ , and  $N_3$  are shown as arcs.

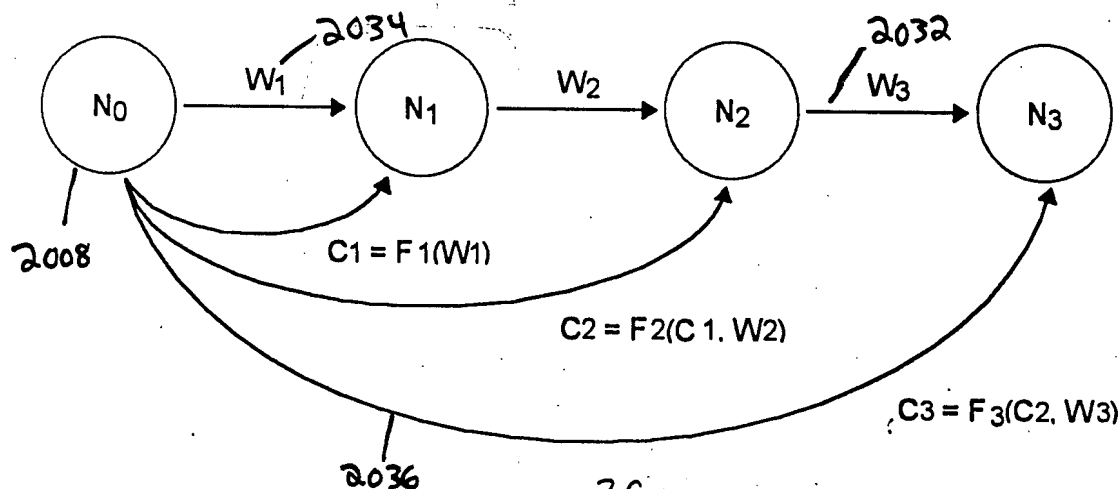
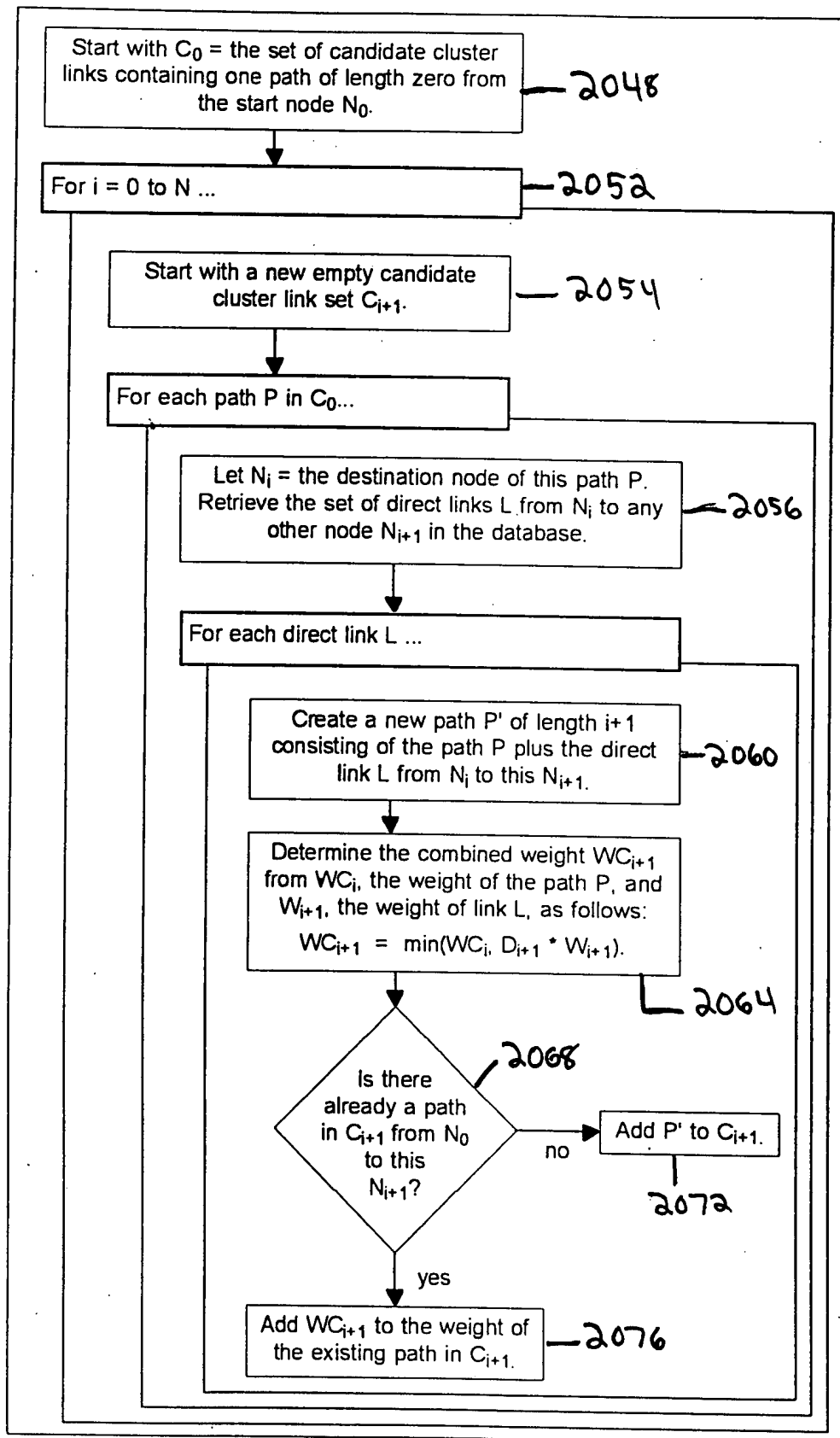


Figure 2: Implied Links





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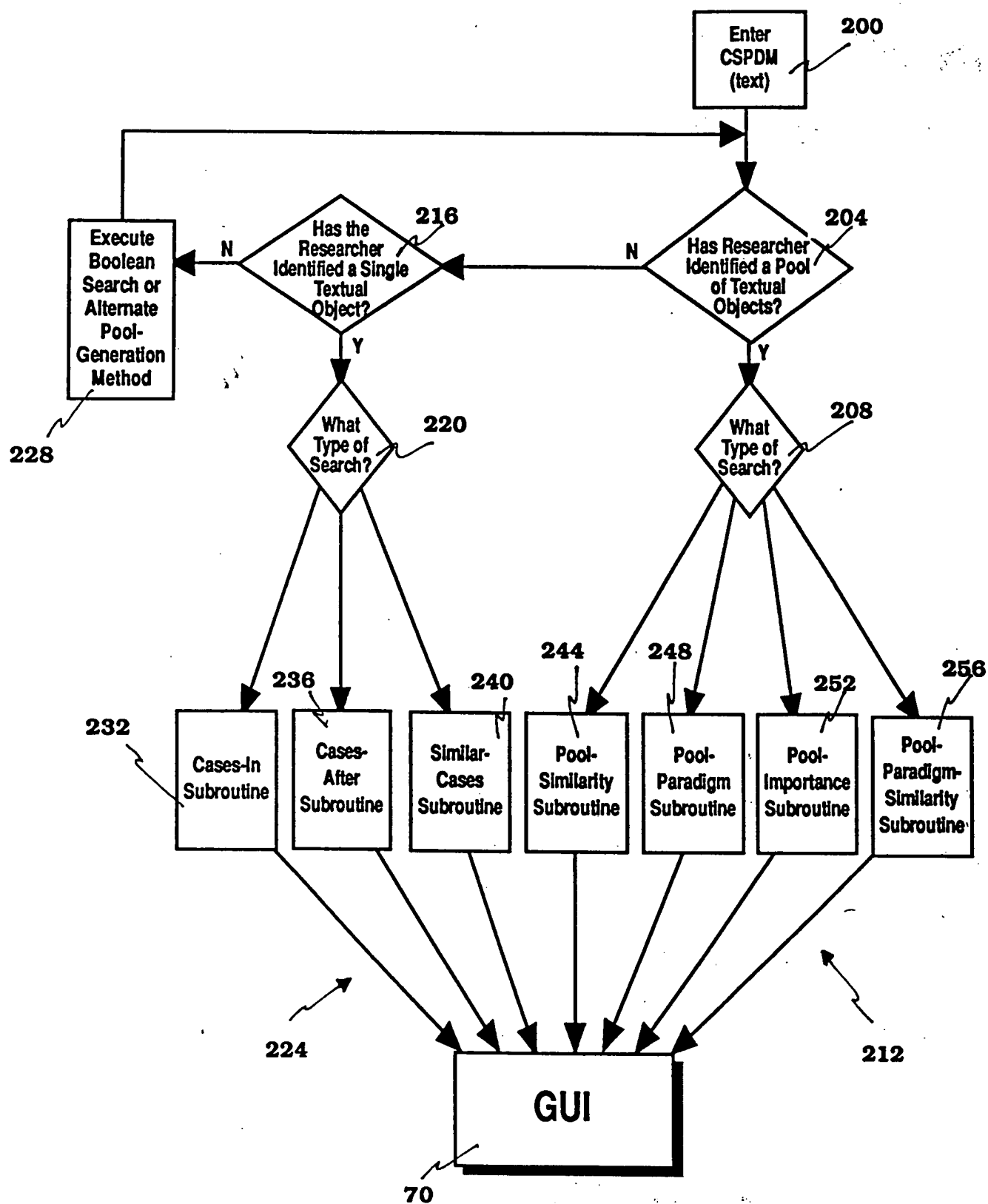
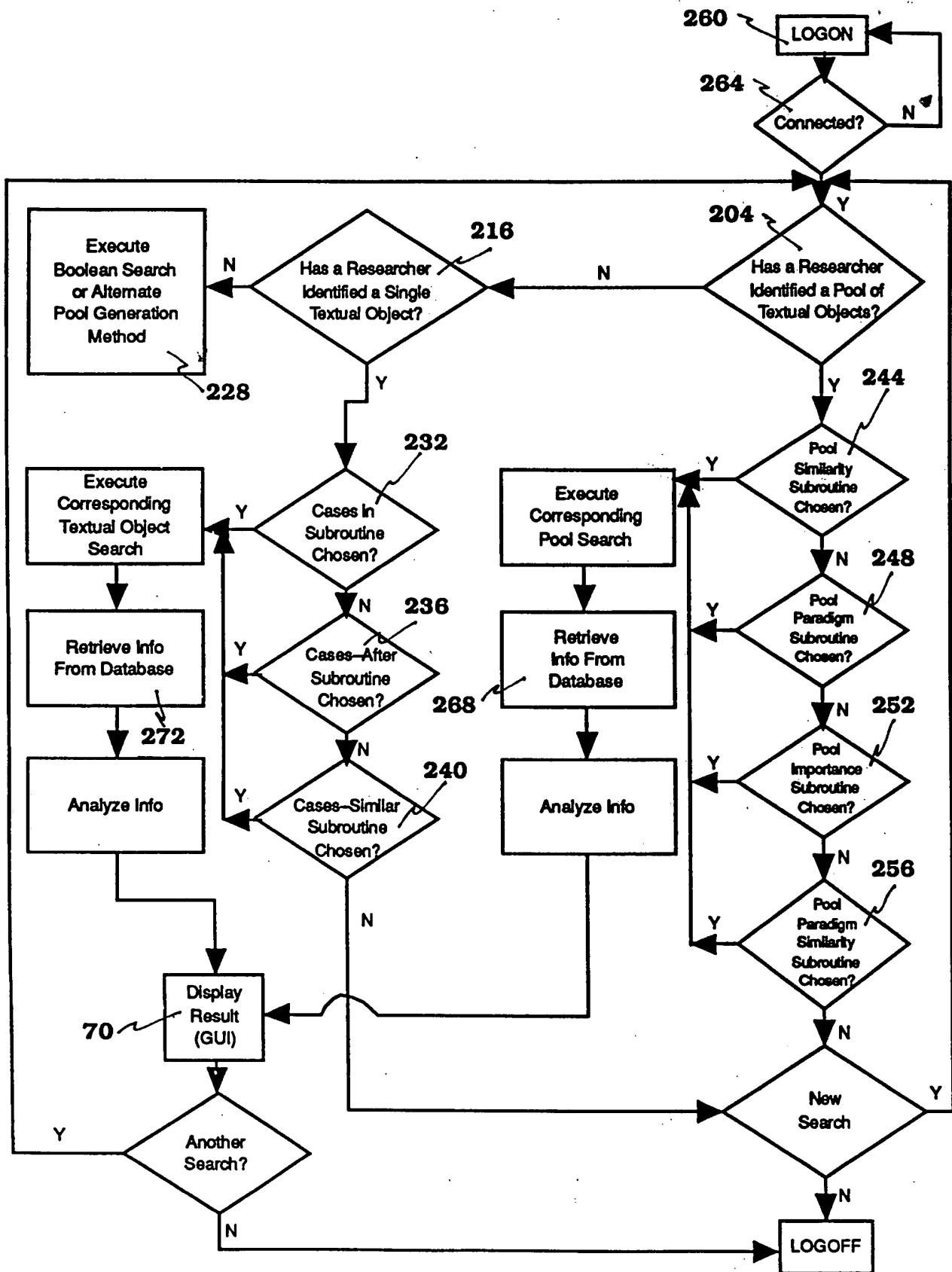


FIG. 4A



**FIG. 4B**

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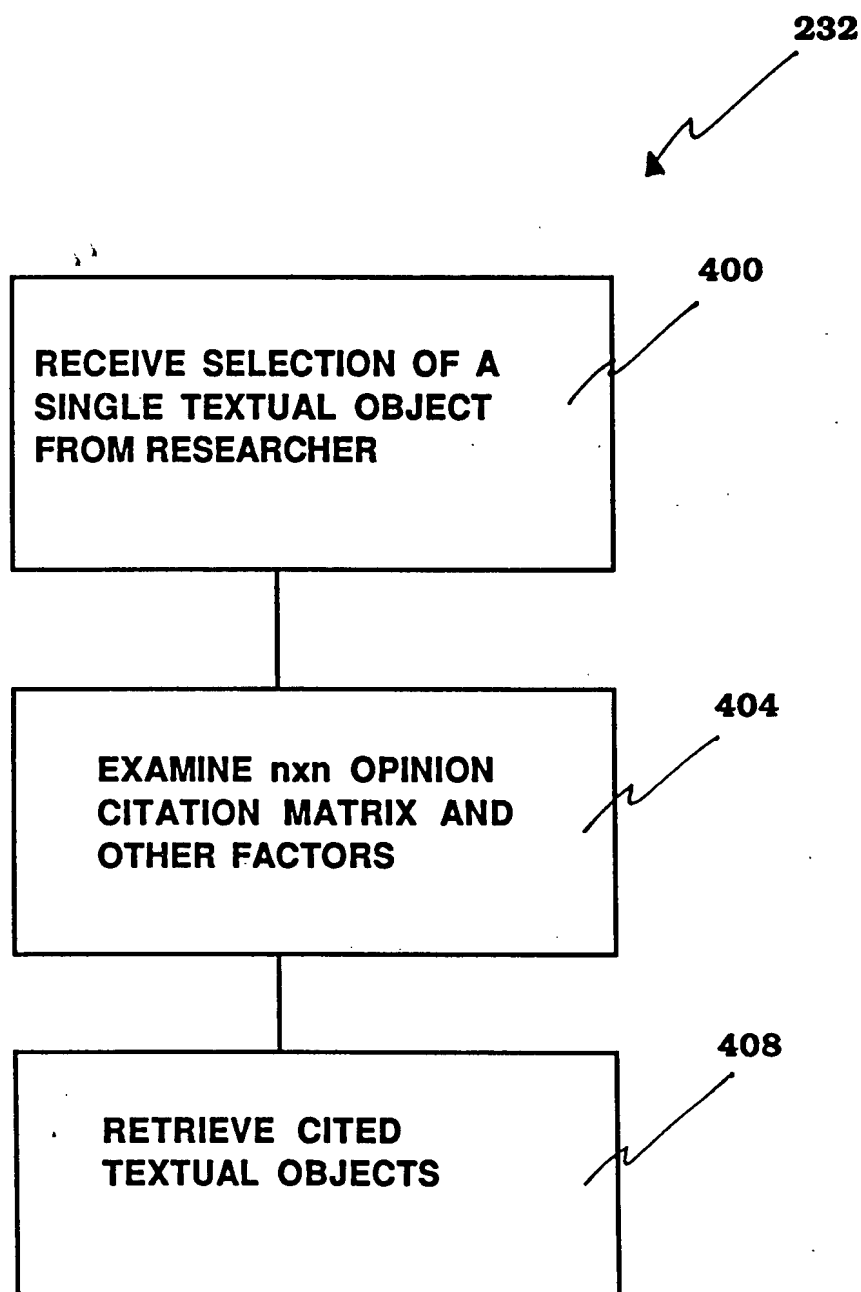


FIG. 4C

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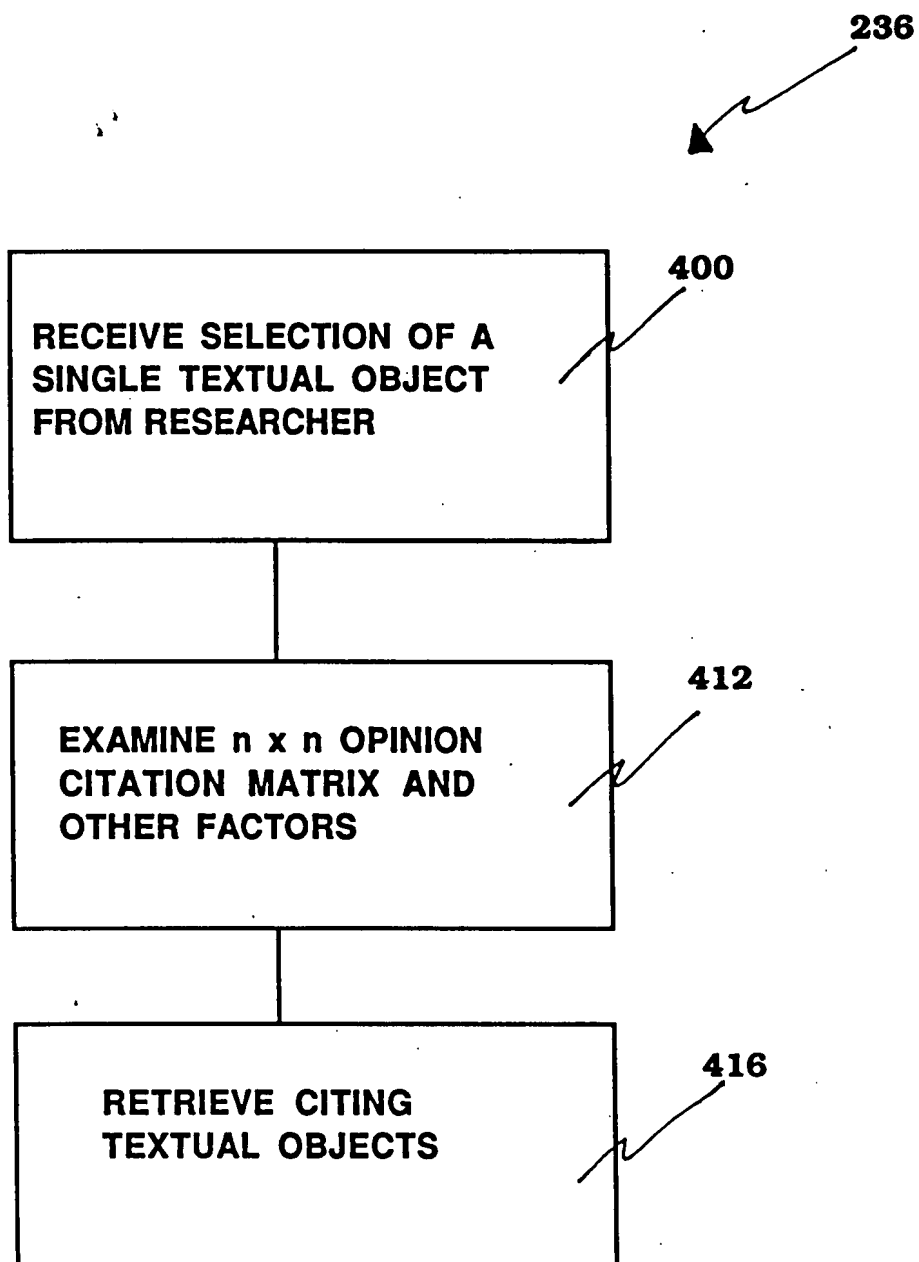


FIG. 4D

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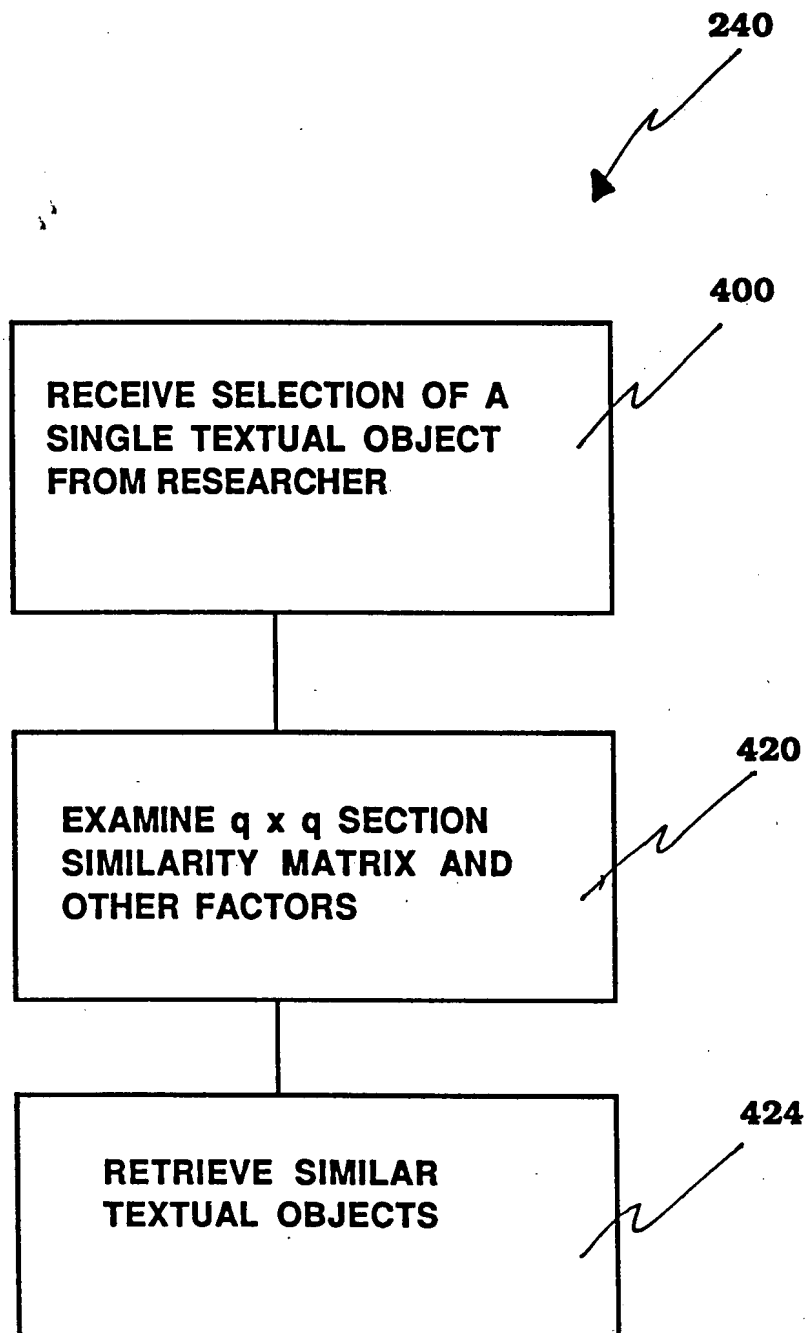


FIG. 4E

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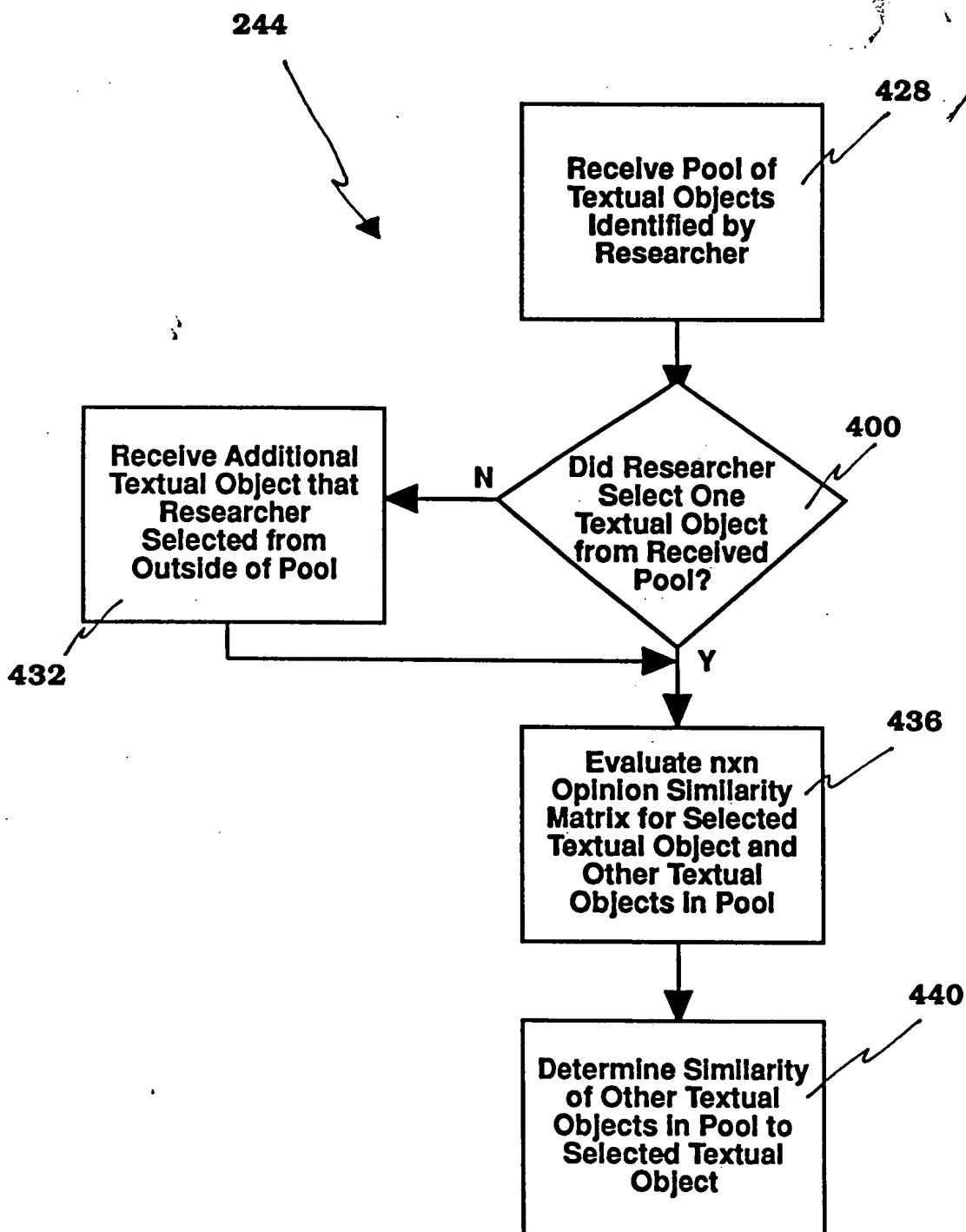


FIG. 4F

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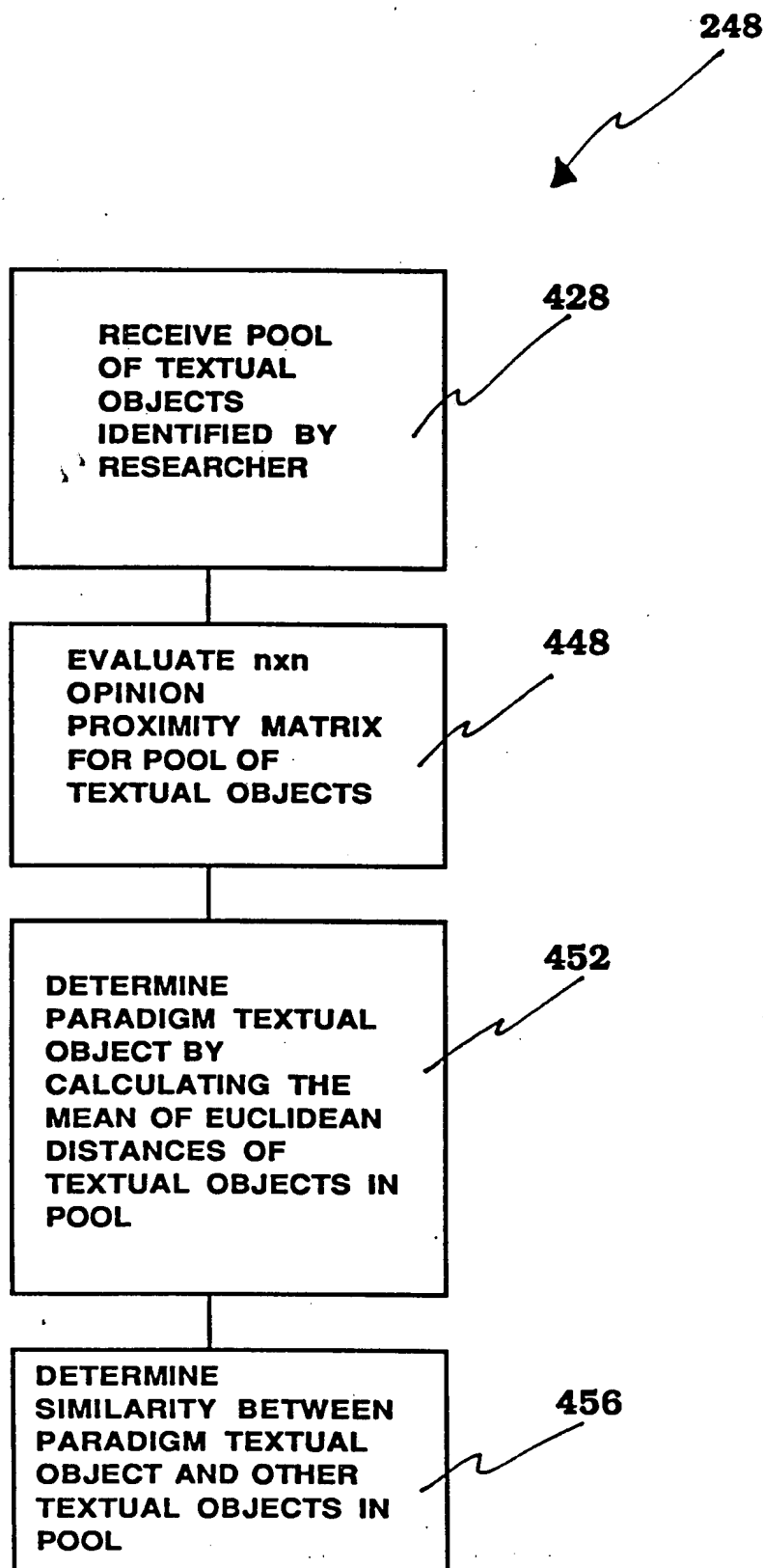


FIG. 4G



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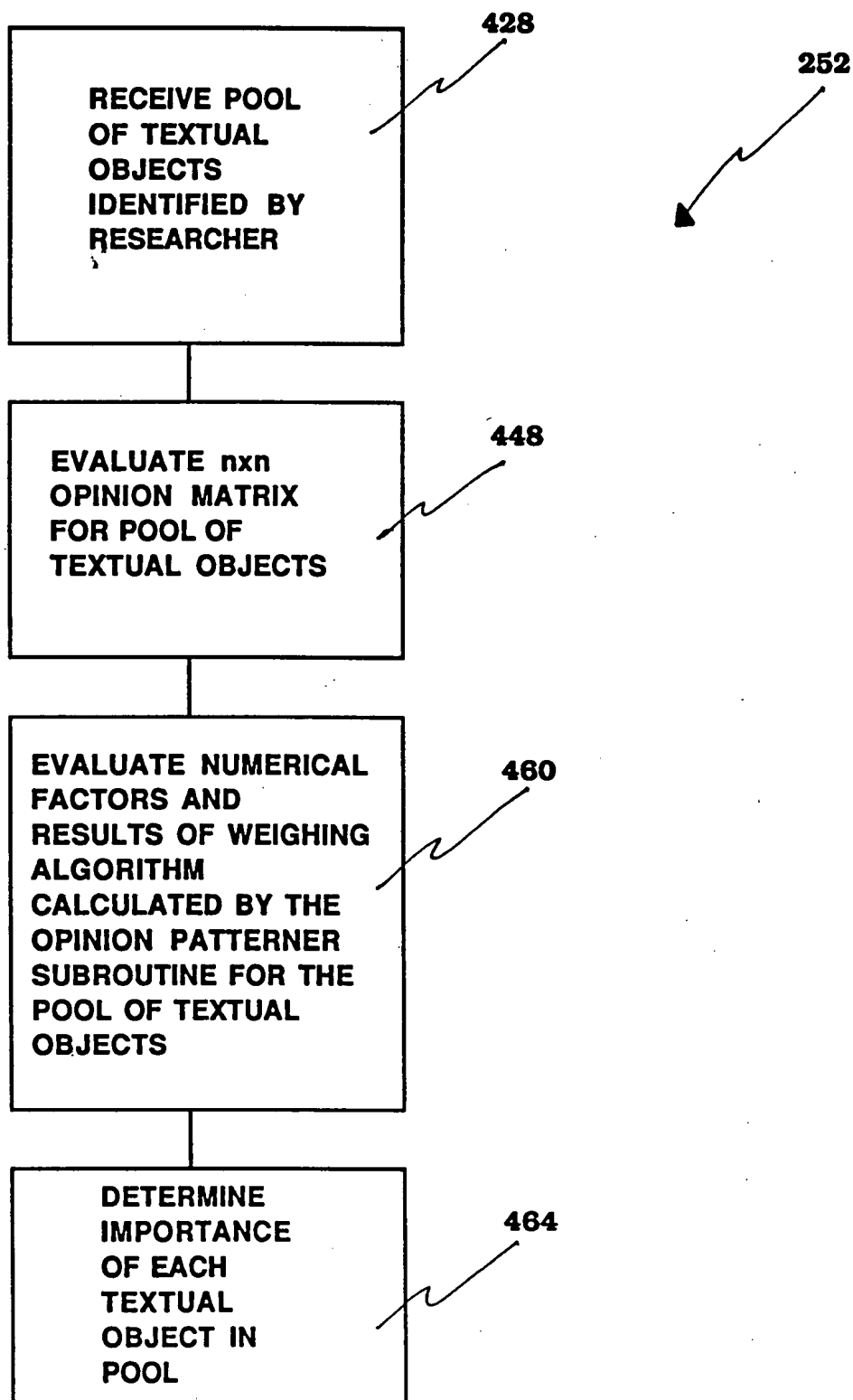


FIG. 4H

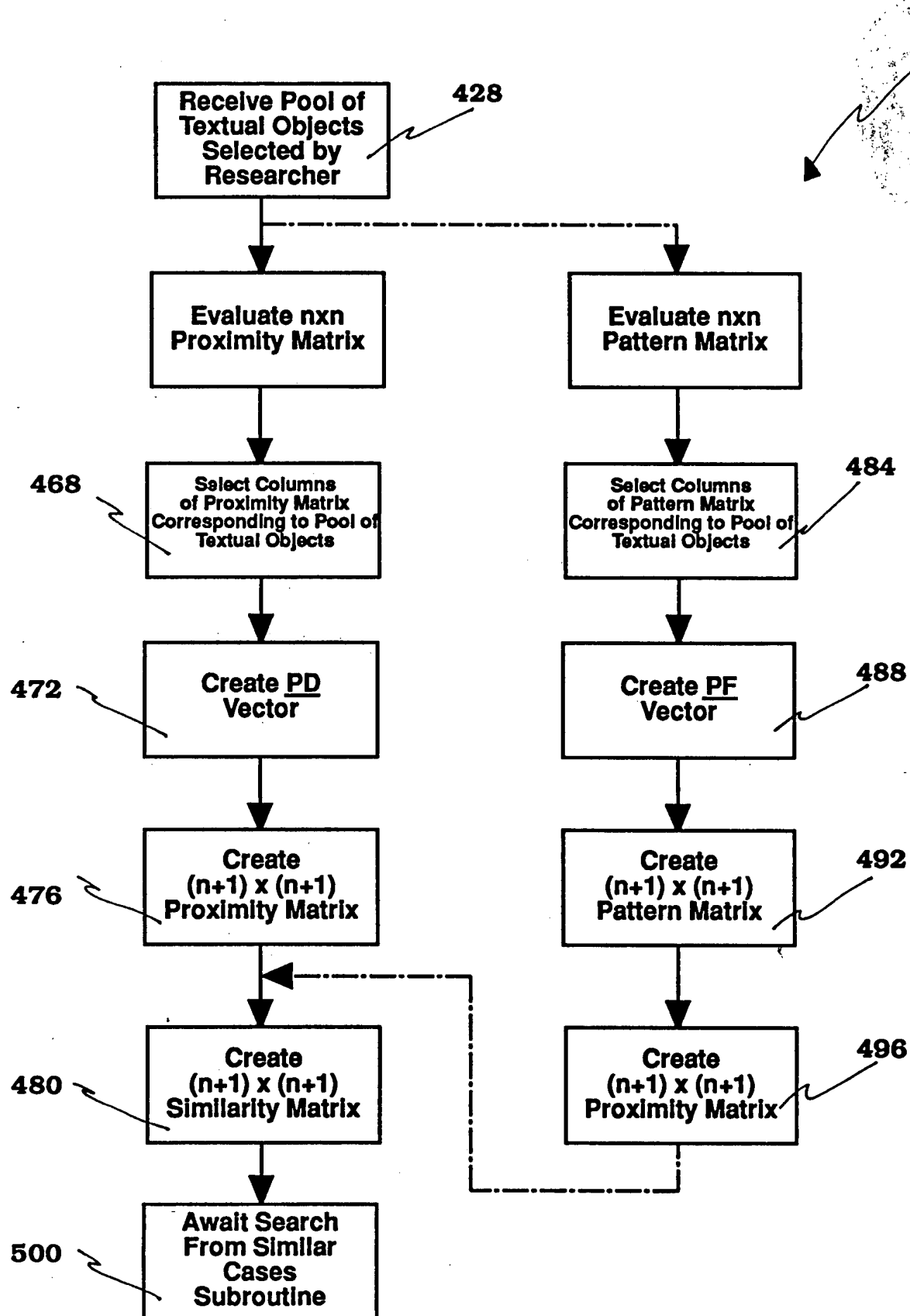


FIG. 4I

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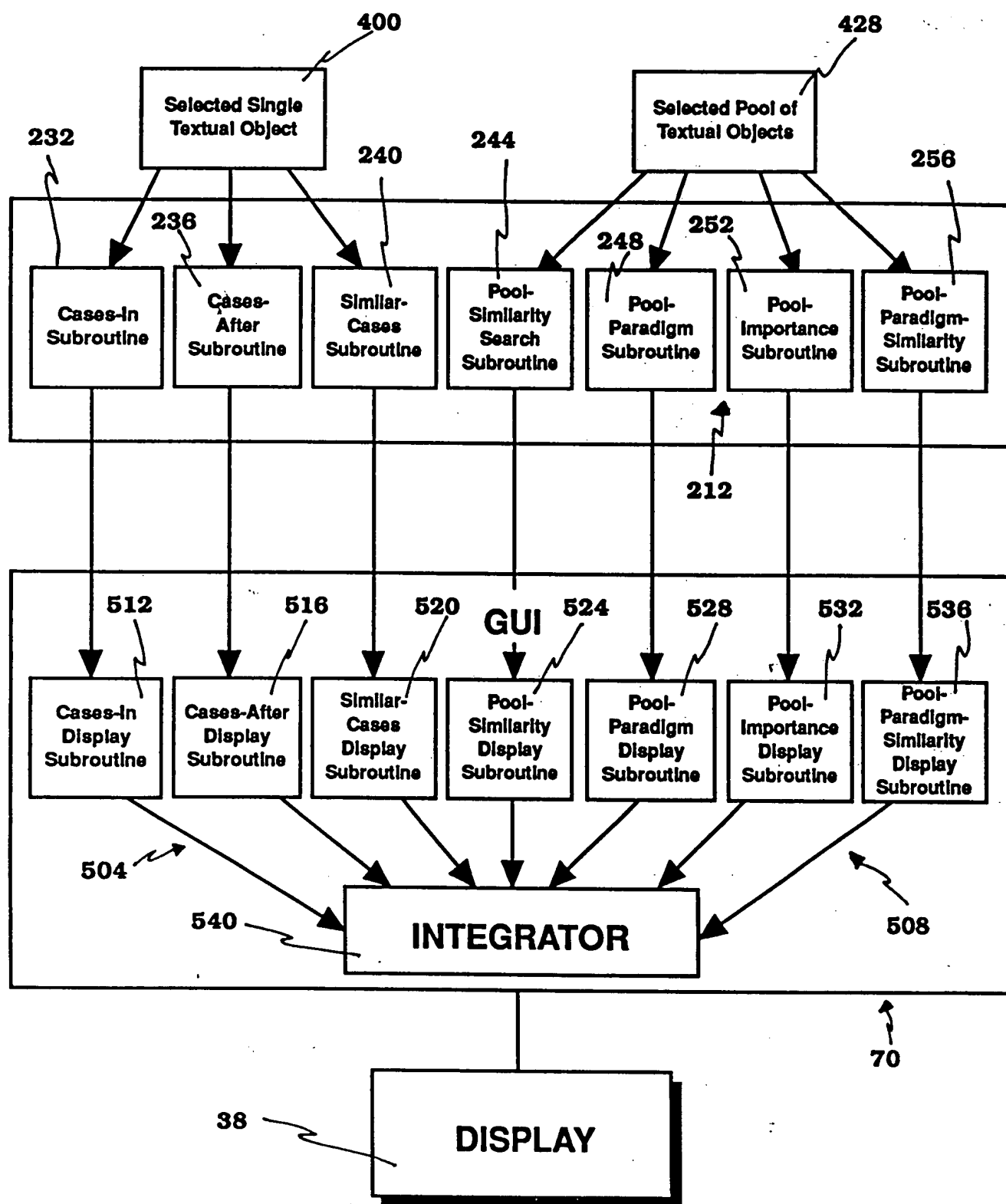


FIG. 5A

2101

[illegible]

[illegible]

0001-

**Fig. 5D**

The diagram illustrates a computer system for legal research, organized into three main functional areas: ANALYSIS, SEARCH, and EXECUTE.

**ANALYSIS SECTION:**

- ANALYSIS: CASES IN** (1000): A grid for inputting case details. It includes fields for **VOLUME** (1010, 1012, 1014, 1016, 1018, 1020), **CATEGORY** (1022, 1024, 1026, 1028, 1030, 1032), **PAGE** (1034, 1036, 1038, 1040, 1042, 1044), and **SECTION** (1046, 1048, 1050, 1052, 1054, 1056).
- SEARCH TITLE: SEARCH 1** (1002): A field for entering the search title.
- ANALYSIS** (1004): A section for inputting search criteria, including **Similar** (1006), **Cases In** (1008), and **Cases After** (1010).
- EXECUTE SEARCH** (1012): A button to execute the search.

**SEARCH SECTION:**

- SEARCH 1:1** (1014): A grid for inputting search criteria, including **YEAR** (1016, 1018, 1020, 1022, 1024, 1026), **DATE** (1028, 1030, 1032, 1034, 1036, 1038), and **WEIGHT** (1040, 1042, 1044, 1046, 1048, 1050).
- SEARCH 1:1** (1014): A grid for inputting search criteria, including **YEAR** (1016, 1018, 1020, 1022, 1024, 1026), **DATE** (1028, 1030, 1032, 1034, 1036, 1038), and **WEIGHT** (1040, 1042, 1044, 1046, 1048, 1050).

**EXECUTE SECTION:**

- EXECUTE SEARCH** (1012): A button to execute the search.
- EXECUTE SEARCH** (1012): A button to execute the search.

The diagram also includes a **STATUTE** (1006) section and a **US CONSTITUTIONAL** (1008) section, which are used to input specific legal references. The system is designed to process these inputs and generate a search result, as indicated by the **SEARCH 1:1** (1014) and **SEARCH 1:1** (1014) labels.



**Fig. 5F**

[illegible]



# SEARCH 1:3

[illegible]

**Fig. 5H**

The figure shows a graphical user interface for a search function. At the top, a title bar contains a window icon and the text "SEARCH 1". Below the title bar, there are several input fields and a section for analysis options.

Input fields and their values:

- SEARCH TITLE: SEARCH 1
- VOLUME: 910
- CATEGORY: f2d
- PAGE: 843
- SECTION: (empty)

Analysis options:

- ANALYSIS
  - ☐ Similar
  - ☐ Cases In
  - ☒ Cases After

At the bottom, there is a button labeled "EXECUTE SEARCH".

Reference numerals point to various elements:

- 1024: Title bar
- 1132: Search title input field
- 1140: Volume input field
- 1144: Category input field
- 1136: Page input field
- 1148: Section input field
- 1152: Analysis section
- 1156: Analysis options
- 1160: Execute Search button

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## Schematic Representations of the Eighteen Primary Patterns

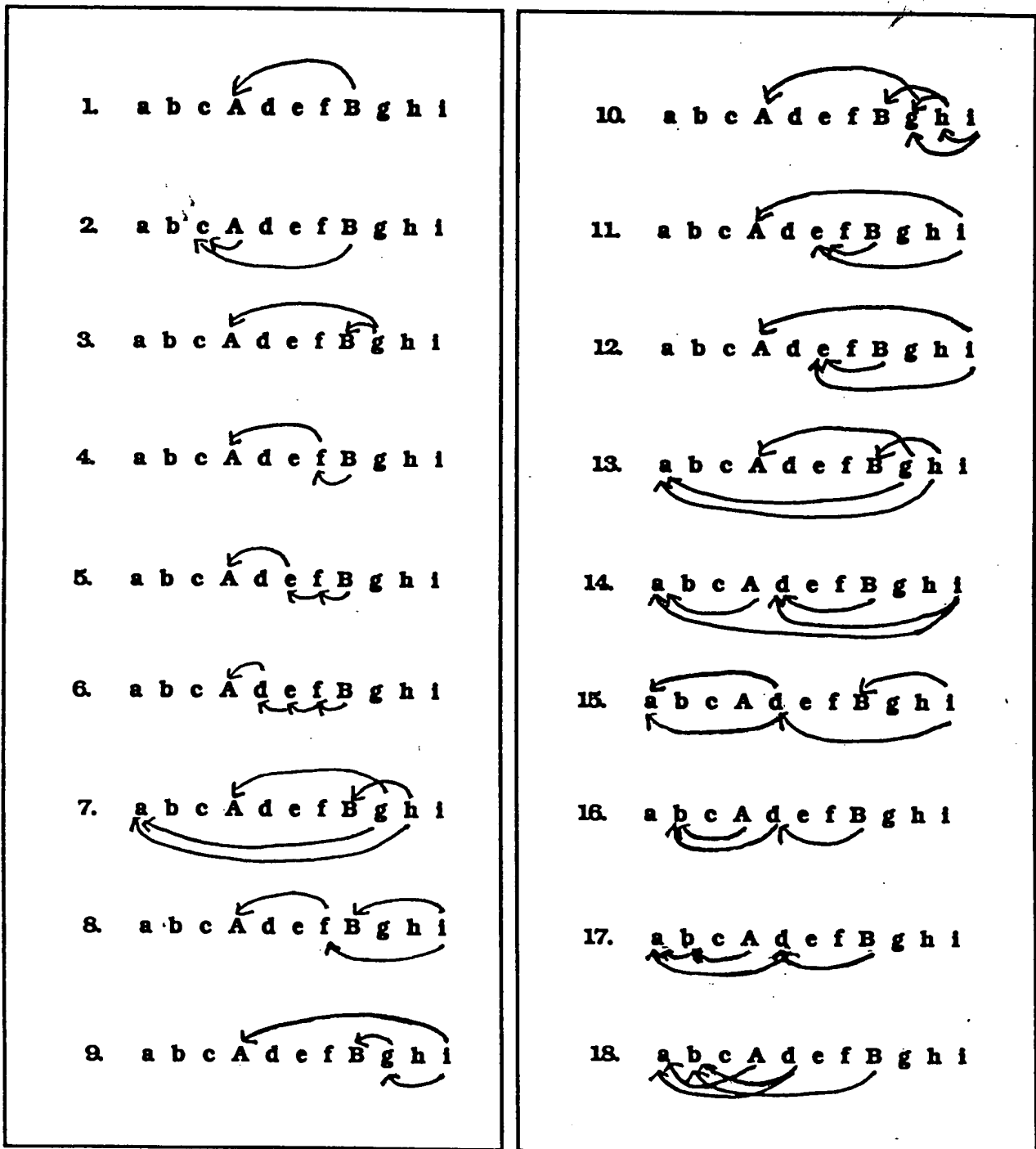
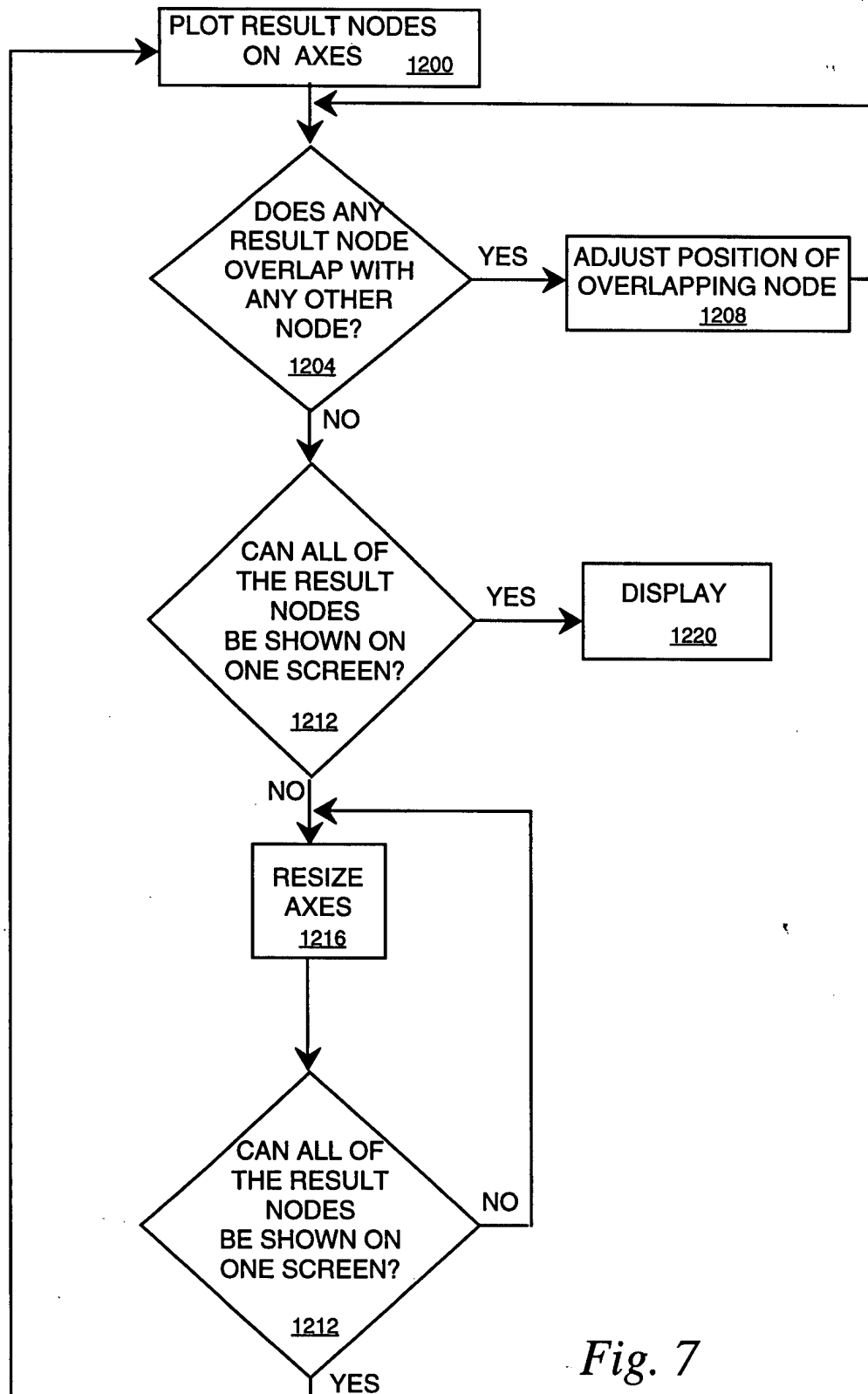


FIG. 6

*Fig. 7*

File Edit View Search Layout Customize V-Search Window Help

Folio Bound VIEWS

Alves v. Commissioner - Cluster Map

Alves v. Commissioner  
734 F.2d 478 (9th Cir. 1984)  
20 of 24 items

Open Save Query Clear Query Next Previous Backtrack Trail Contents Highlighter Bookmark Go to Field

Cluster Influence Source Show text Show usage

2100, 1032 26 U.S.C. § 83 (1991) 2104

Centel Comm. Co., Inc. v. Commissioner  
92 T.C. 612 (1989) 1032

Montelepre Systemed, Inc. v. Commissioner  
61 T.C.M. 1782 (1991)

Koss v. Commissioner  
57 T.C.M. 882 (1989)

Pagel, Inc. v. Commissioner  
91 T.C. 200 (1988)

Klingier Electric Co. v. United States  
776 F. Supp. 4158 (S.D. Miss. 1991) 1032

Robinson v. Commissioner  
82 T.C. 424 (1984)

1033 Campbell v. Commissioner  
59 T.C.M. 236 (1990) 2120

Schulman v. Commissioner  
93 T.C. 623 (1989)

Robinson v. Commissioner  
805 F.2d 38 (1st Cir. 1986)

Treas. Reg. § 1.83-3 (1985)

26 U.S.C. § 83(c) (1983)

Montelepre Systemed, Inc. v. Commissioner  
956 F.2d 496 (5th Cir. 1992)

Centel Comm. Co., Inc. v. Commissioner  
920 F.2d 1196 (7th Cir. 1990)

Bagley v. Commissioner  
806 F.2d 169 (8th Cir. 1986)

Rev. Rul. 83-22

2100, 1032 26 U.S.C. § 83 (1991) 2104

Centel Comm. Co., Inc. v. Commissioner  
92 T.C. 612 (1989) 1032

Montelepre Systemed, Inc. v. Commissioner  
61 T.C.M. 1782 (1991)

Koss v. Commissioner  
57 T.C.M. 882 (1989)

Pagel, Inc. v. Commissioner  
91 T.C. 200 (1988)

Klingier Electric Co. v. United States  
776 F. Supp. 4158 (S.D. Miss. 1991) 1032

Robinson v. Commissioner  
82 T.C. 424 (1984)

1033 Campbell v. Commissioner  
59 T.C.M. 236 (1990) 2120

Schulman v. Commissioner  
93 T.C. 623 (1989)

Robinson v. Commissioner  
805 F.2d 38 (1st Cir. 1986)

Treas. Reg. § 1.83-3 (1985)

26 U.S.C. § 83(c) (1983)

Montelepre Systemed, Inc. v. Commissioner  
956 F.2d 496 (5th Cir. 1992)

Centel Comm. Co., Inc. v. Commissioner  
920 F.2d 1196 (7th Cir. 1990)

Bagley v. Commissioner  
806 F.2d 169 (8th Cir. 1986)

Rev. Rul. 83-22

Alves v. Commissioner, 734 F.2d 478 (9th Cir. 1984)  
San Diego, Calif. 92101, for petitioners-appellants. Jay Miller,  
Department of Justice, Washington, D. C. 20530, for  
respondent-appellee.

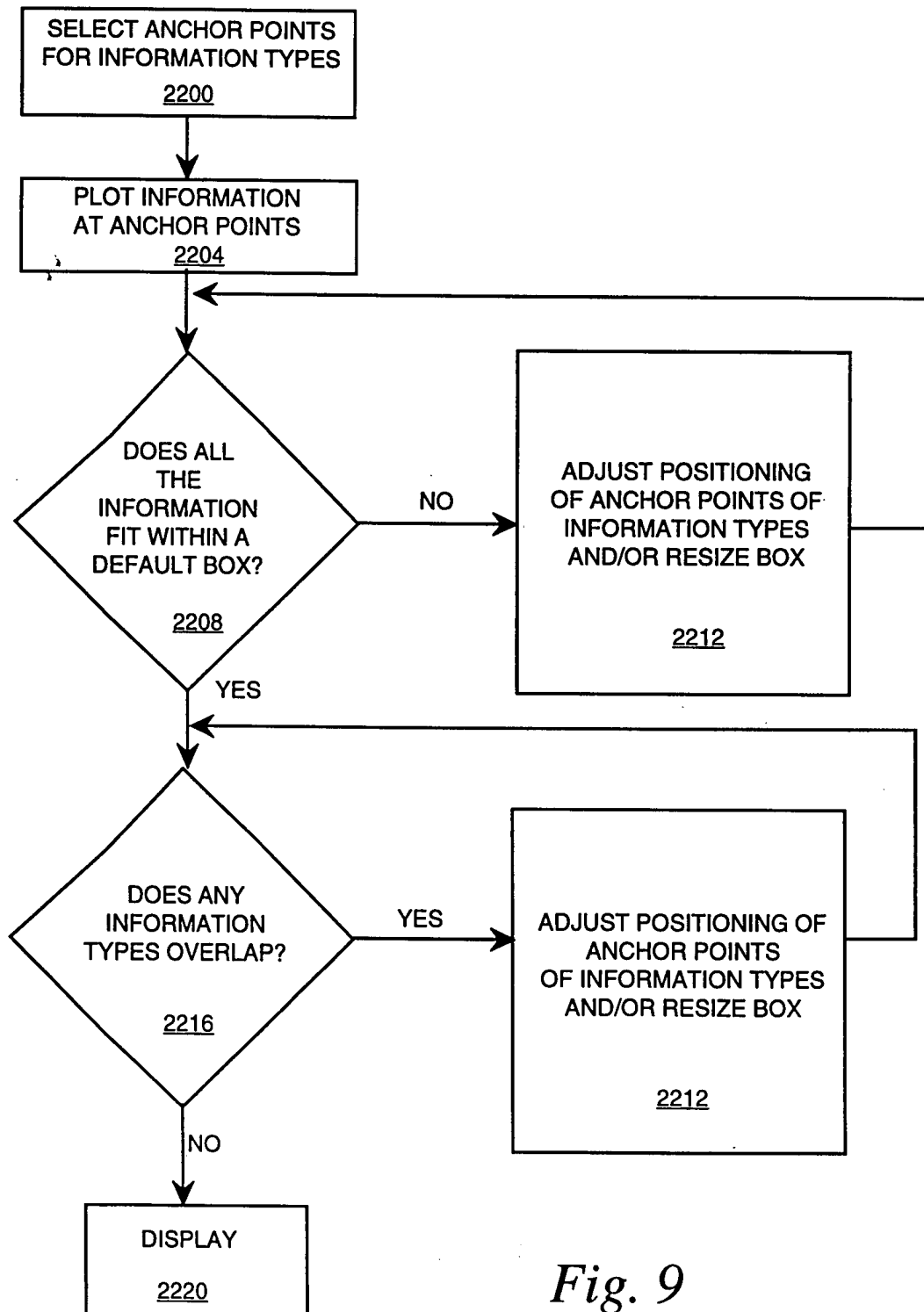
Before Kennedy, Schroeder, and Boochever, Circuit Judges.

2122  
Opinion  
Schroeder, Circuit Judge:

Lawrence J. Alves appeals a Tax Court decision sustaining the Commissioner's finding of deficiency for 1974 and 1975. Alves v. Commissioner, 79 T. C. 864 (1982). The appeal raises an unusual question under Section 83 of the Internal Revenue Code, 26 U.S.C. § 83 (1982). Section 83 requires that an employee who has purchased restricted stock in connection with his "performance of services" must include as ordinary income the stock's appreciation in value between the time of purchase and the time the restrictions lapse, unless at the time he purchased the stock he elected to include as income the difference between the purchase price and the fair market value at that time. <sup>1</sup> The issue here is whether Section 83 applies to an employee's purchase of restricted stock when, according to the stipulation of the parties, the amount paid for the stock equaled its full fair market value, without regard to any restrictions. The Tax Court, with two dissenting opinions, held that Section 83 applies to all restricted stock that is transferred "in connection with the performance of services," regardless of the amount paid for it. 79 T. C. at 878. We affirm.

Facts

General Digital Corporation (the company) was formed in April, 1970, to manufacture and market micro-electronic circuits. At its first meeting, the company's board of directors resolved to issue 90,000 shares of its common stock to its company president, and 66,000 shares to the company underwriter. The board also voted to sell an additional 264,000 shares of common stock to seven named

*Fig. 9*

Influence Map - Brown v. United States

Brown v. United States  
358 F.2d 1002 (Cl. Ct. 1984)

OVERHEULED ISSUE NO. 1 (1982) 125 Cl. 2035  
OVERHEULED ISSUE NO. 2 (1993) 362 F.2d 1013

2116

Keene Corp. v. United States  
113 S. Ct. 2035 (1993)

OVERHEULED ISSUE NO. 1 AT 206

UNR Industries, Inc. v. United States  
962 F.2d 1013 (Fed. Cir. 1992)

OVERHEULED ISSUE NO. 2 AT 1022

Webb & Associates v. United States  
19 Cl. Ct. 650 (1990)

OVERHEULED ISSUE NO. 2 AT 885

1032

Boehm v. United States  
22 Cl. Ct. 511 (1991)

OVERHEULED ISSUE NO. 2 AT 885

2112

Comm. Dept. of Children And Youth Services v. United States  
16 Cl. Ct. 102 (1989)

OVERHEULED ISSUE NO. 2 AT 103

Johns-Manville Corp. v. United States  
855 F.2d 1556 (Fed. Cir. 1988)

DISTINGUISHING AT 1560

1032

2112

Benally v. United States  
14 Cl. Ct. 8 (1987)

DISTINGUISHING ISSUE NO. 1 AT 11

Marshall Leasing, Inc. v. United States  
13 Cl. Ct. 368 (1987)

DISTINGUISHING ISSUE NO. 1 AT 370

Keene Corp. v. United States  
12 Cl. Ct. 197 (1987)  
Issue No. 1 at 212

Keene Corp. v. United States  
17 Cl. Ct. 146 (1989)  
Issue No. 1 at 158

OVERHEULED ISSUE NO. 2 AT 158

Donnelly v. United States  
28 Fed. Cl. 62 (1993)

QUESTIONING ISSUE NO. 1 AT 65

George F. Miller Farms v. United States  
27 Fed. Cl. 672 (1993)

QUESTIONING ISSUE NO. 1 AT 672

Hardwick Bros. Co. v. United States  
26 Cl. Ct. 884 (1992)

QUESTIONING AT 885

## Source Map - Terry v. Ohio 292 U.S. 1 (1968)

Terry v. Ohio  
292 U.S. 1 (1968)

U.S. CONST. AMEND. IV (1791)

Bech v. Ohio  
379 U.S. 89 (1964)

Katz v. United States  
389 U.S. 347, 351 (1967)  
(Harlan, J., concurring)

ALTIFFMYETAL  
DETECTION OF CRIME (1967)

Preston v. United States  
376 U.S. 364 (1964)

People v. Rivera  
14 N.Y.2d 441 (1964)

CERT. DENIED 379 U.S. 373

Camara v. Mun. Ct.  
387 U.S. 523 (1967)

Warden v. Hayden  
387 U.S. 294, 310 (1967)  
(Fortas, J., concurring)

Mapp v. Ohio  
367 U.S. 643 (1961)

Elhins v. United States  
364 U.S. 206 (1960)

Brinegar v. United States  
338 U.S. 160 (1949)

United States v. Di Re  
332 U.S. 581 (1948)

Johnson v. United States  
333 U.S. 10 (1948)

Carrol v. United States  
267 U.S. 132 (1925)

Ellis v. United States  
264 F.2d 372 (1959)

1032

Warren, E.  
1953-1969

AUTHORED 292 U.S. 1

1112

People v. Taggart  
20 N.Y.2d 335 (1967)

Linkletter v. Waller  
381 U.S. 618 (1965)

Wang Sun v. United States  
371 U.S. 471 (1963)

Henry v. United States  
361 U.S. 98 (1959)

Ohio Rev. Code § 2923.01 (1953)

1032

U.S. CONST. AMEND. XIV (1868)

1032

State v. Terry  
5 Ohio App.2d 122 (1966)

AFFIRMED 387 U.S. 329

IV-LAFAVE  
FOURTH AMENDMENT (1965) § 31-13

United States v. Poller  
43 F.2d 911 (1930)

Agrelló v. United States  
269 U.S. 20 (1925)

Warden v. Hayden  
387 U.S. 294 (1967)



Cluster Map - Pagel, Inc. v. Commissioner

Pagel, Inc. v. Commissioner  
91 T.C. 200 (1988)

1032

26 U.S.C. § 83

Centel Comm. Co., Inc. v. Commissioner  
92 T.C. 612 (1989)

Montelepre Systemed, Inc. v. Commissioner  
61 T.C.M. 1782 (1991)

Schulman v. Commissioner  
93 T.C. 623 (1989)

Koss v. Commissioner  
57 T.C.M. 882 (1989)

Treas. Reg. § 1.83-7

Campbell v. Commissioner  
59 T.C.M. 236 (1990)

Robinson v. Commissioner  
805 F.2d 38 (1986)

Alves v. Commissioner  
734 F.2d 478 (1984)

Robinson v. Commissioner  
82 T.C. 444 (1984)

Cohn v. Commissioner  
73 T.C. 443 (1979)

Cassetta v. Commissioner  
39 T.C.M. 188 (1979)

Montelepre Systemed, Inc. v. Commissioner  
956 F.2d 496 (1992)

Klingler Electric Co. v. United States  
776 F.Supp. 1158 (1991)

Rev. Rul. 83-22

Richardson v. Commissioner  
64 T.C. 621 (1975)

26 U.S.C. § 421

Olimo v. Commissioner  
38 T.C.M. 1112 (1979)

The Tax Reform Act of 1969  
Pub. L. 91-172 1969

The Securities Exchange Act of 1934  
15 U.S.C. § 78p(b) 1934

Aldoo v. Commissioner  
65 T.C.M. 1798 (1993)

Jan. 1924 Jan. 1930 Jan. 1936 Jan. 1942 Jan. 1948 Jan. 1954 Jan. 1960 Jan. 1966 Jan. 1972 Jan. 1978 Jan. 1984 Jan. 1990

1032

2020

2020

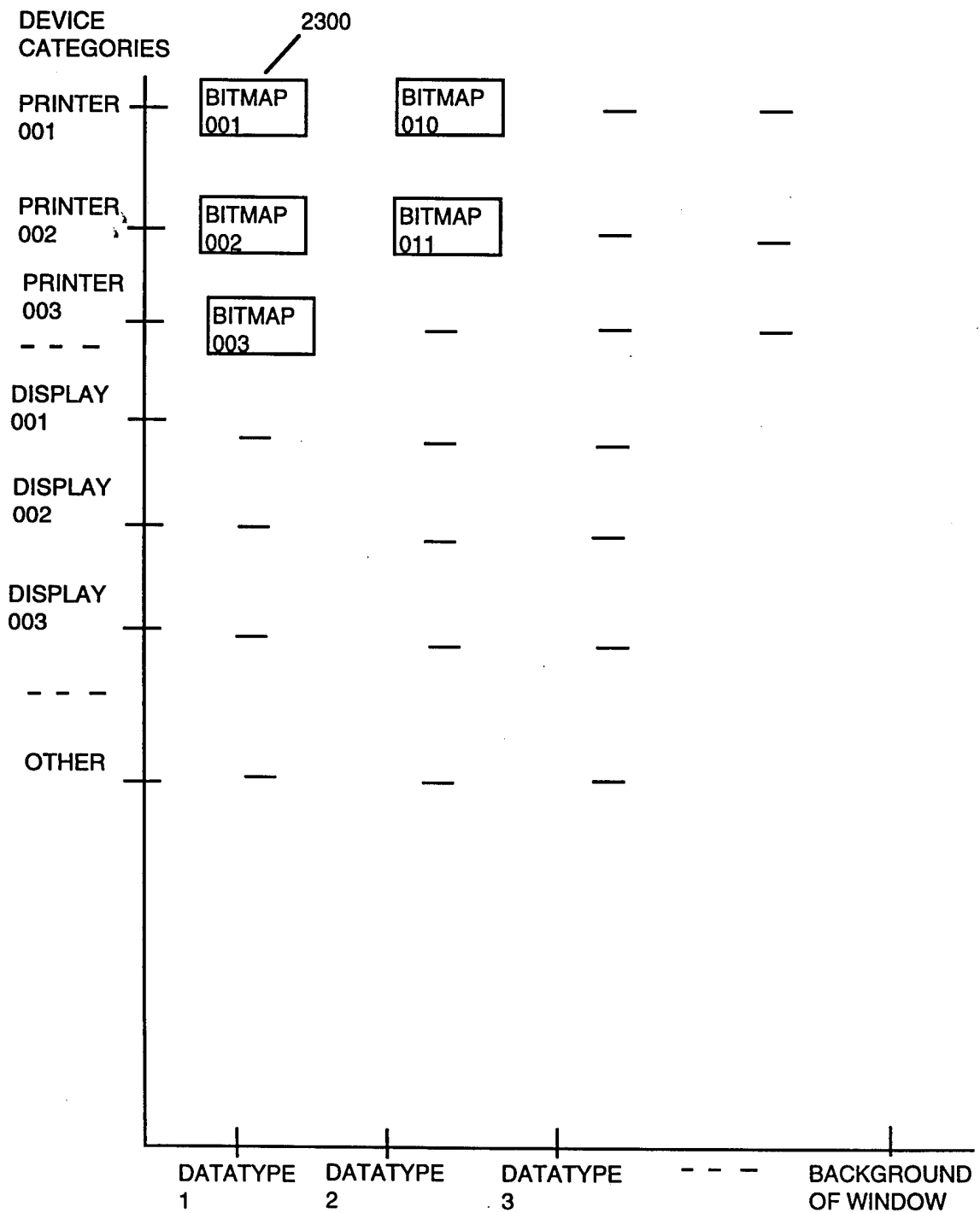


Fig. 11

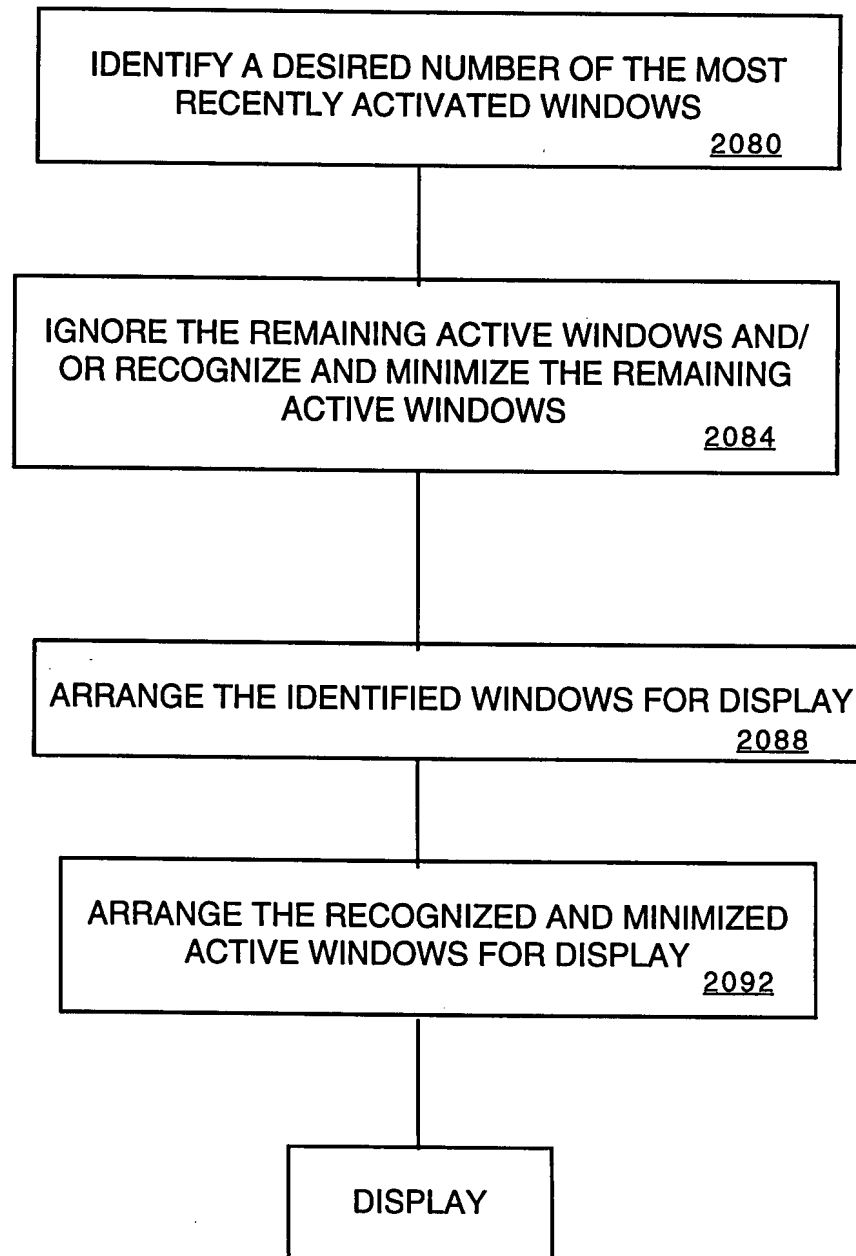


FIG. 12

## Folio Bound VIEWS

**UNION PACIFIC  
RAILWAY  
COMPANY v.  
BOTSFORD.**

**Union Pacific Railway  
Co. v. Botsford 141  
U.S. 250**

**Error to the Circuit Court of  
the United States for the  
District of Indiana.  
No. 1375.  
Submitted January 6,  
1891.—Decided May 25,  
1891.**

**Libertech Holding** Case  
Federal  
courts do not have  
the power under  
the federal statutes or  
common law to  
order a plaintiff in a  
personal injury civil  
suit to submit to a  
physical examination  
requested by the

**UNION PACIFIC RAILWAY COMPANY v. BOTSFORD.**

**Union Pacific Railway Co. v. Botsford**  
**Co. v. Botsford 141 U.S. 250**

Error to the Circuit Court of the United States for the District of Indiana.

No. 1375.

Submitted January 6, 1891.—Decided May 25, 1891.

Libertech Holding	Case
Federal courts do not have the power under federal statutes or common law to order a plaintiff in a personal injury civil suit to submit to a physical examination requested by the	

**Union Pacific Railway Co. v. Botsford 141 U.S. 250**

**Error to the Circuit Court of the United States for the District of Indiana.**

No. 1375.

Submitted January 6, 1891.—Decided May 25, 1891.

**Libertech Case Holding:** Federal courts do not have the power under federal statutes or common law to order a plaintiff in a personal injury civil suit to submit to a physical examination requested by the defense to determine the extent of his or her injuries. Justice Gray wrote the opinion for 7 Members of the Court.

Union Pacific Railroad Co. • Boston • Charles Man

Union Pacific Railway Co. v. Botsford  
144 U.S. 250 (1891)

8. of 24 Names

U.S. CONST. AMEND. XIV, 1869

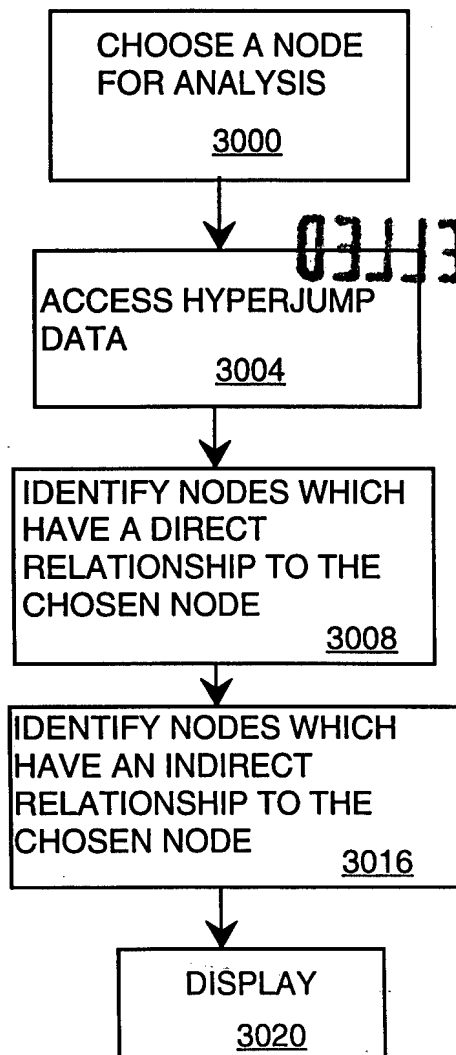
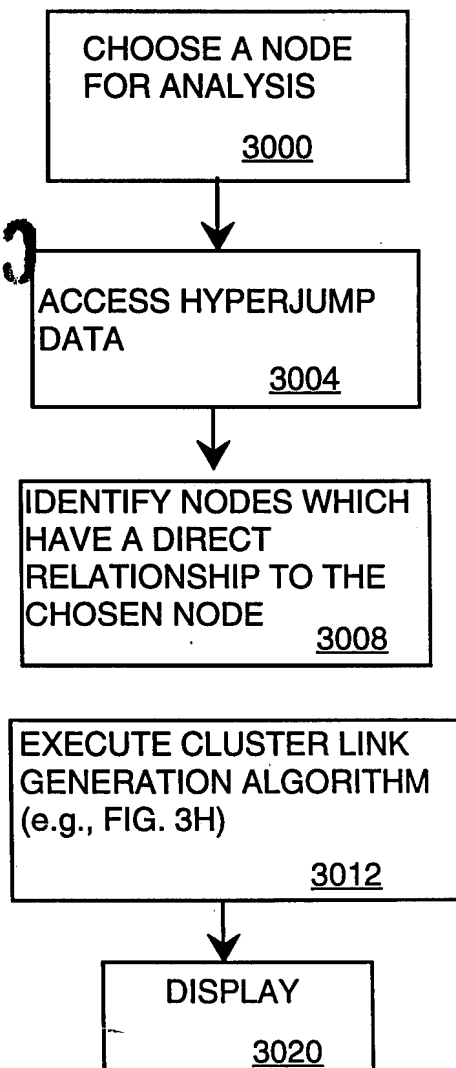
010115-119 11010

**Superintendent of Belcherdown State School & Galkewitz  
373 Main St. 728 (1977)**

U.S. CONST. AMEND. 1791

Grissold v. Connecticut, 181 U.S. 479 (1900)

H. L. & M. J. L. L.

*Fig. 14A**Fig. 14B*